

Thank you for the opportunity to present to you today regarding my concerns and thoughts on marijuana commercialization and legalization in Pennsylvania from a public health and safety perspective.

Using Colorado as an example, we have seen what would be categorized as unintended consequences related to cannabis expansion and commercialization. I am thankful that the state of Pennsylvania is taking a positive step to protect its citizens from a public health and safety angle. I will summarize a few of the, what I feel, are important issues to take into consideration.

OPIOID CRISIS

One of the platforms to legalize cannabis for medical, and perhaps, recreational purposes in Colorado in many states is that it will help with our drug crisis. Provisional 2023 data, as of April 19, 2024, shows that Colorado shattered another record in drug overdoses under the banner of legalization. Overall in the United States our drug crisis worsens in the era of legalization for both medical and recreational purposes.

PEDIATRIC POISONINGS

Pediatric poisonings related to marijuana are on the rise not only in Colorado but in other states, including Pennsylvania.

In Colorado, the largest percent increase in reported marijuana exposures occurred when adult use cannabis retail and medical markets open to the public in 2014 and 2010 respectively. Since 2013, 2/3 of marijuana exposures have been marijuana only. Nearly 50% of marijuana exposures were in children five years old and younger and more than 50% we're related to edibles.

A publication March 2024 from the Journal of Adolescent Health clearly demonstrates that marijuana poisonings are steadily on the rise particularly compared to other substances.

Pediatric marijuana poisonings are also on the rise in Canada. Note that the province of Quebec does not allow edibles and have a significantly less pediatric poisonings related to marijuana compared to some of the other provinces.

SUICIDE DATA

In the state of Colorado, marijuana is currently the most prevalent substance found in completed teen suicide, as well as in completed suicides for those 25 years of age and younger. This trend began in 2012, interestingly, when Colorado voted to legalize for recreational purposes, and has steadily worsened over time, now with nearly 43% of teens who complete suicide positive for marijuana, with alcohol at 27%. Many states do not test for toxicology in suicide.

GERIATRIC DATA

Although many states are not tracking this type of data, in the state of California, for example, there has been a 1,800% increase of people over the age of 65 ending up in the emergency department related to marijuana poisoning. This could be related to the duration of California's

medical marijuana program and promotion of cannabis through a variety of advertising, including social media.

IN UTERO EXPOSURE DATA

In the state of Colorado, a recent survey of dispensaries showed that more than 70% of them recommended women use during first trimester pregnancy, a critical time of brain development in the fetus. The ABCD study has been following outcomes related to in utero exposure to cannabis and are finding significant problems in those offspring, particularly behavior related problems, which include psychotic like experiences which are not found in other substance exposures. Those problems persist into early adolescence which has been published at the National Institute of Health. There is also more recent data showing higher incidences of autism spectrum disorder and attention deficit hyperactivity disorder in cannabis exposures in utero.

CHILD FATALITY DATA

Most states do not track data like the state of Texas, which shows that in a case of child abuse or neglect fatality, the most common substance found by the perpetrator, active or past use, is clearly marijuana followed by nothing, more than all of the other substances combined. This would be important data for the state of Pennsylvania to monitor.

PRODUCT INTEGRITY

The state of Oregon in 2019 audit it's they are on a program and was only able to inspect 3% of stores and 1/3 of growers for compliance. The state of Oregon concluded that they could not guarantee the results of testing and could not guarantee that products were safe for human consumption. Most states do not look internally to make things better. More recent data out of Colorado shows the dispensaries were inflating THC potency in order to make more money. Lab directors in states like California and Nevada were found purposely faking testing results putting consumers at safety risks. Colorado has not introspectively looked at its entire program for more many years. Also in Colorado recalls are made long after products are likely consumed. There is no requirement to sign up for these types of recalls in Colorado.

SUMMARY

Generally speaking our country has not done a good job with the current legal drugs that are available such as tobacco, alcohol, and opioids. Now there is another addiction for profit industry creating already established societal harms and it is critical that the appropriate safety measures are in place in Pennsylvania before access is available to your citizens.

I have been asked many times, if Colorado could do it over again what should have been done differently. One of the mistakes Colorado made is not having a state run program initially where there can be tighter control on access and products, with adequate tracking and monitoring of data.

The Colorado Department of Public Health and Environment has done a very good job in monitoring and publishing data and would encourage the state of Pennsylvania to do the same. Other things to consider:

Severely restrict access to youth, with strong penalties for those providing to youth

Mandatory drug testing on violent crimes and associated data tracked overtime, since we know there is a strong link between cannabis use and violence.

Recommend consumers register on site at the dispensary (med and rec) for potential recalls of contaminated products and it should be imperative that products do not end up on the shelf for purchase is potentially contaminated.

Eliminate home grows which are breeding grounds for illegal activity and taxing law enforcement

Discourage use during pregnancy due to known negative impacts on the unborn
Screen both mother and father for their cannabis use in children with ADHD/ASD.
Canada does not recommend men use cannabis if wanting to start a family

Support a potency cap, starting at 10% THC, due to risk of psychosis

Discourage smoking and vaping

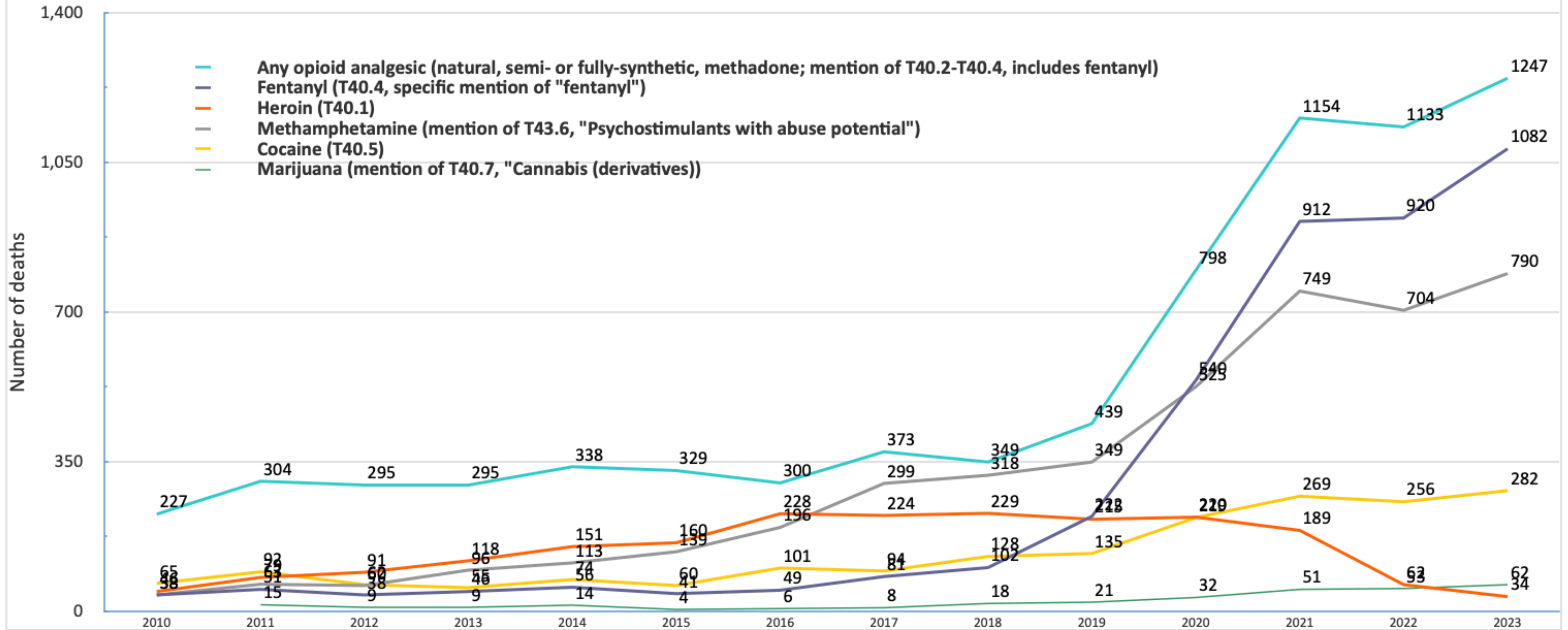
Monitor marijuana-related driving impacts, including fatalities

Have strong independent lab testing requirements and hold producers accountable for contamination with heavy fines

Thank you for your time and thank you for your work for the state of Pennsylvania.

Drug overdose deaths by category of specific drug involvement: 2010-2022

Colorado residents,



Deaths involving more than one substance will be counted in each respective category..
Source: Vital Statistics Program, Colorado Department of Public Health and Environment.

Annual Frequency of Reported Marijuana Exposures, Colorado 2000-2021

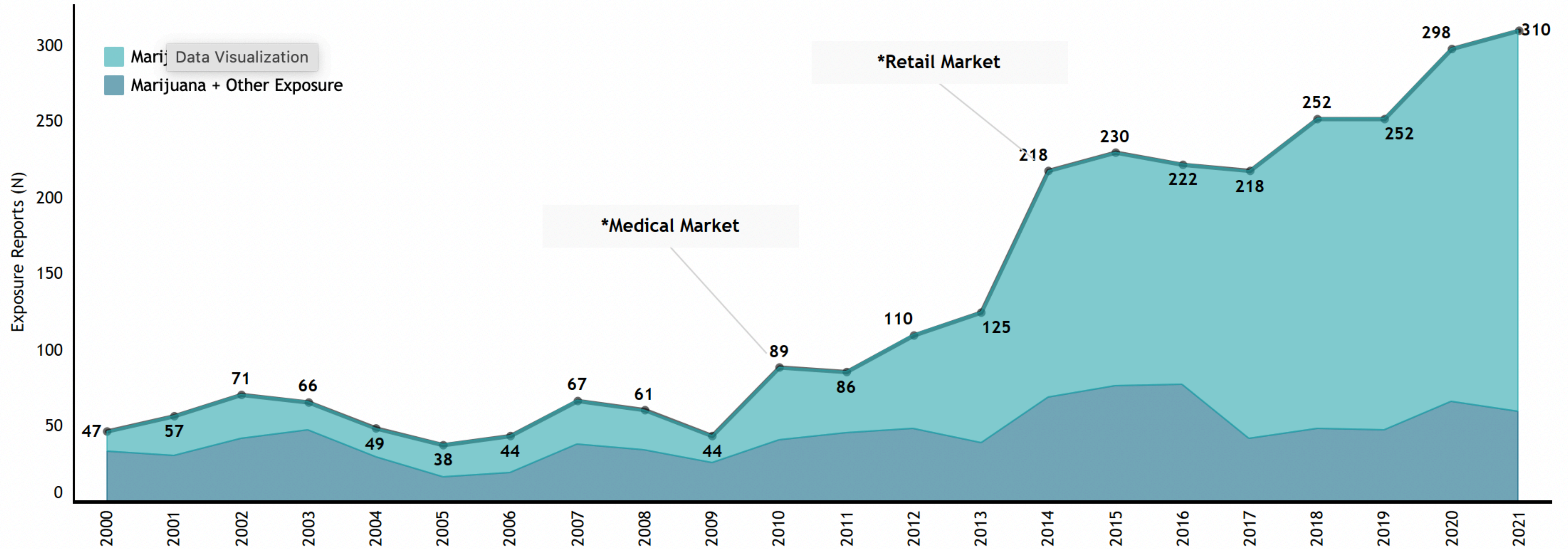


Figure includes:
Ages: All; Product Type: All; Exposure Intention: All; Exposures <=5 suppressed

<https://marijuanahealthreport.colorado.gov/health-data/poison-center-data>

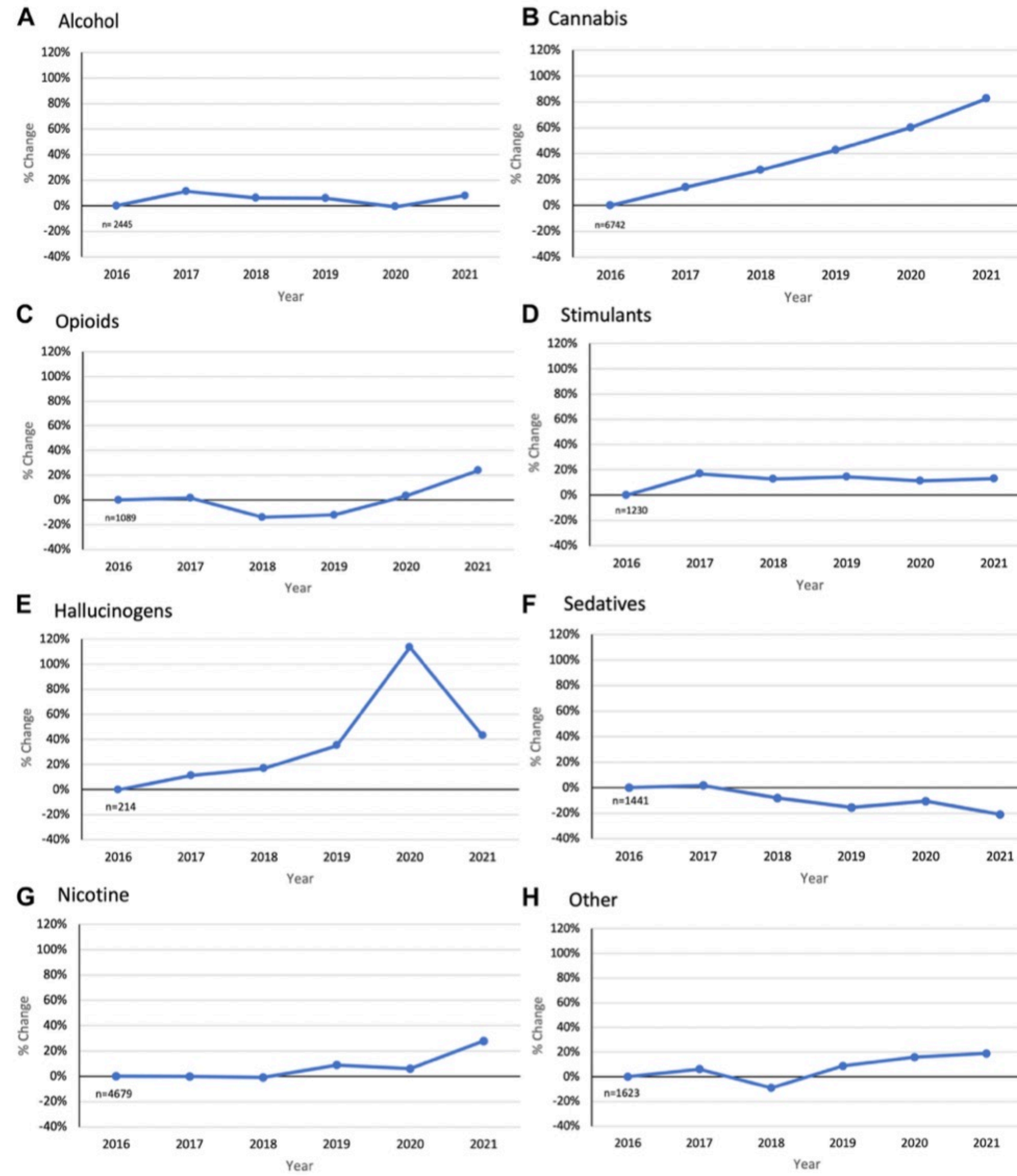
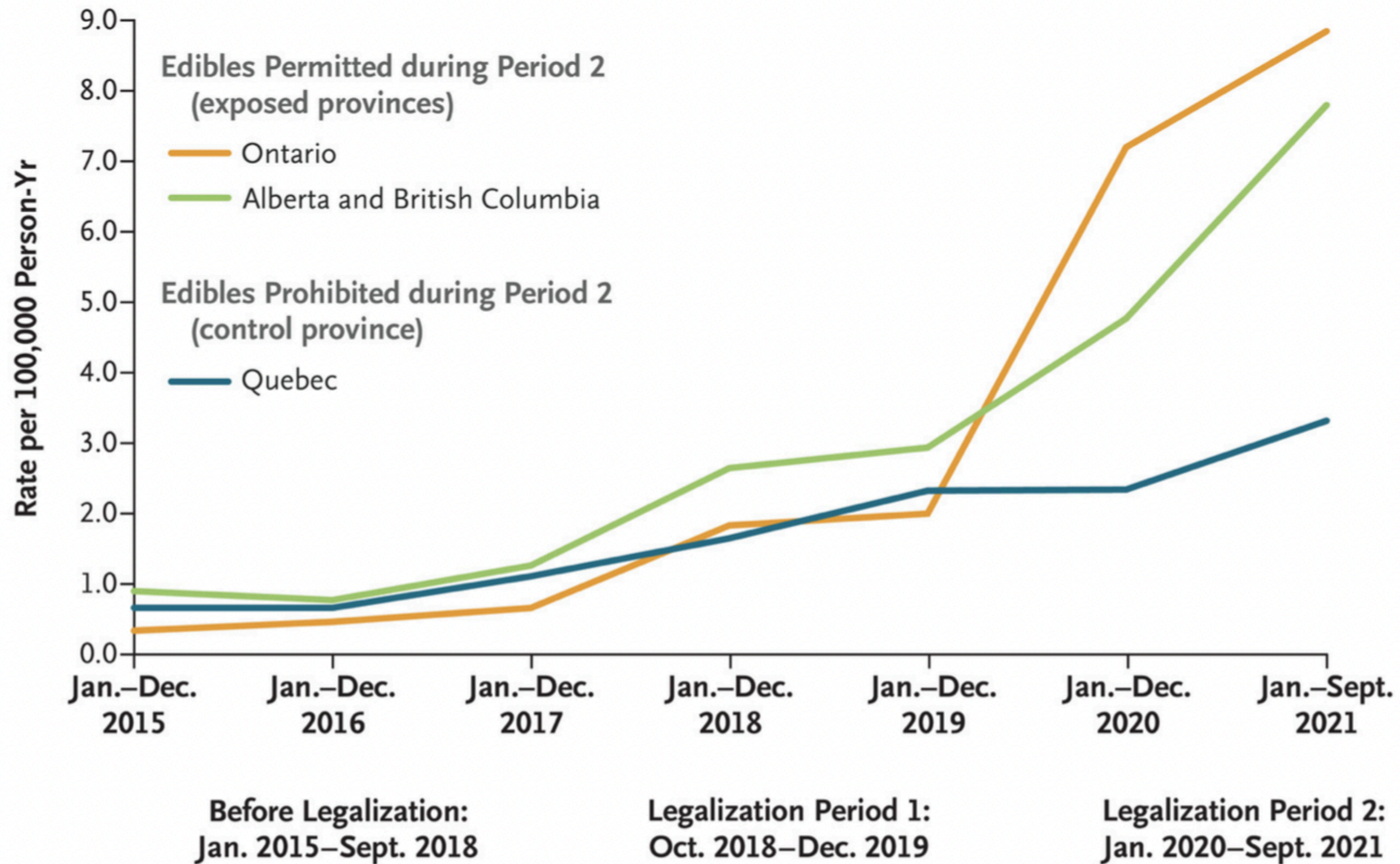


Figure 2. Percentage change of substance-related visits by substance from 2016 to 2021. Substance-related growth from 2016 by substance: Alcohol (A), Cannabis (B), Opioids (C), Stimulants (D), Hallucinogens (E), Sedatives (F), Nicotine (G), and Other Substances (H). Growth values were calculated by generalized estimating equations to develop percentage growth for each substance. Growth values calculated relative to number of visits, n, in 2016.



Suicide in Colorado: Circumstances, Toxicology, and Injury Location, 2020-2021, includes Race/Hispanic Origin

Colorado Violent Death Reporting System

Select Year:

2021 2021

County of residence: (All) Sex: (All) Age: 15-19 years Race: (All) Hispanic Origin: (All)

Education: (All) Marital status: (All) Veteran status (ever in U.S. Armed Forces): Not a veteran

Method used to inflict the fatal injury: (All)

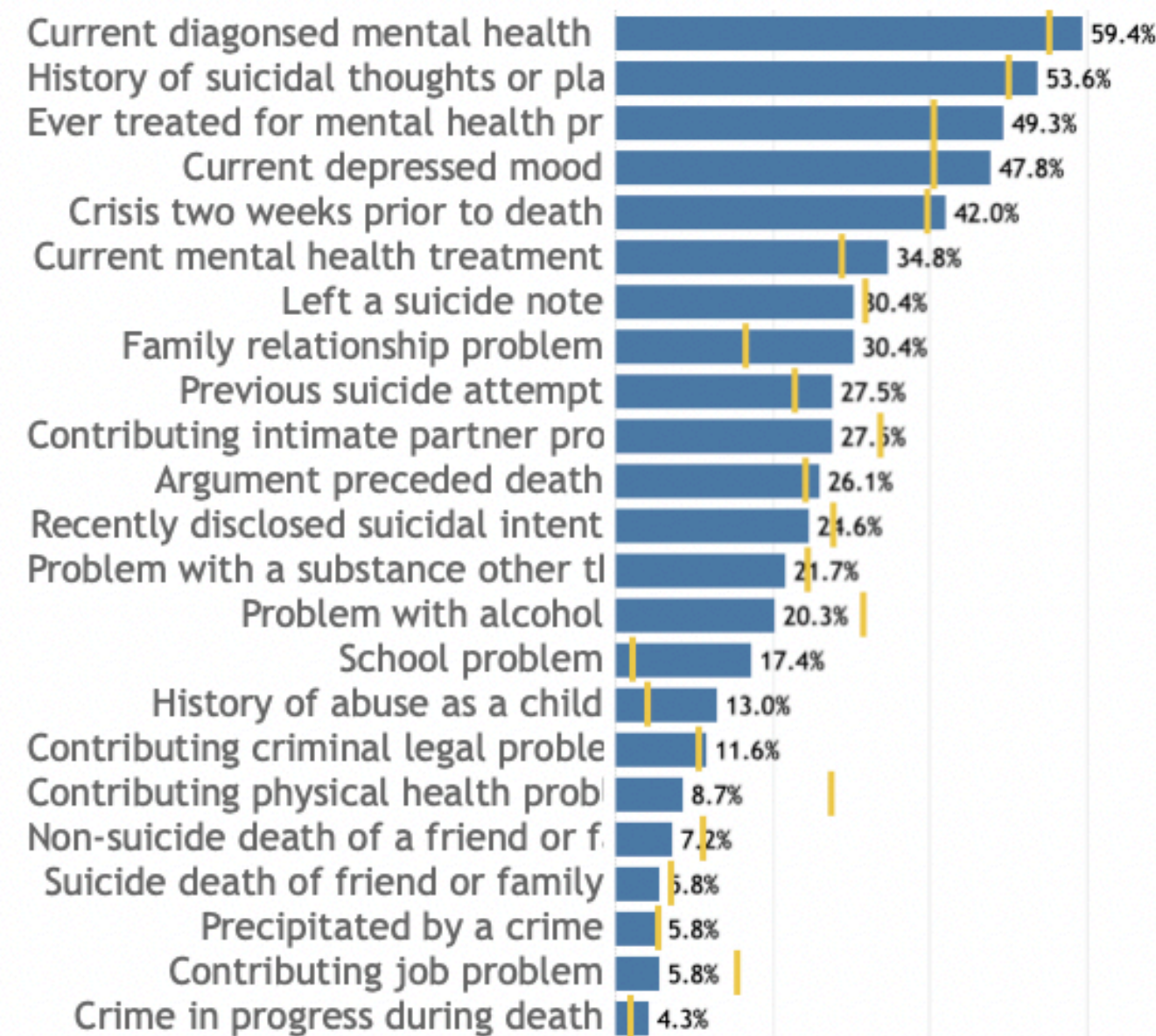
Total suicides entire state: 1,352

Total suicides selected population: 71

For all charts below: the bars represent the values for selected population, the yellow reference bands are the values for the entire

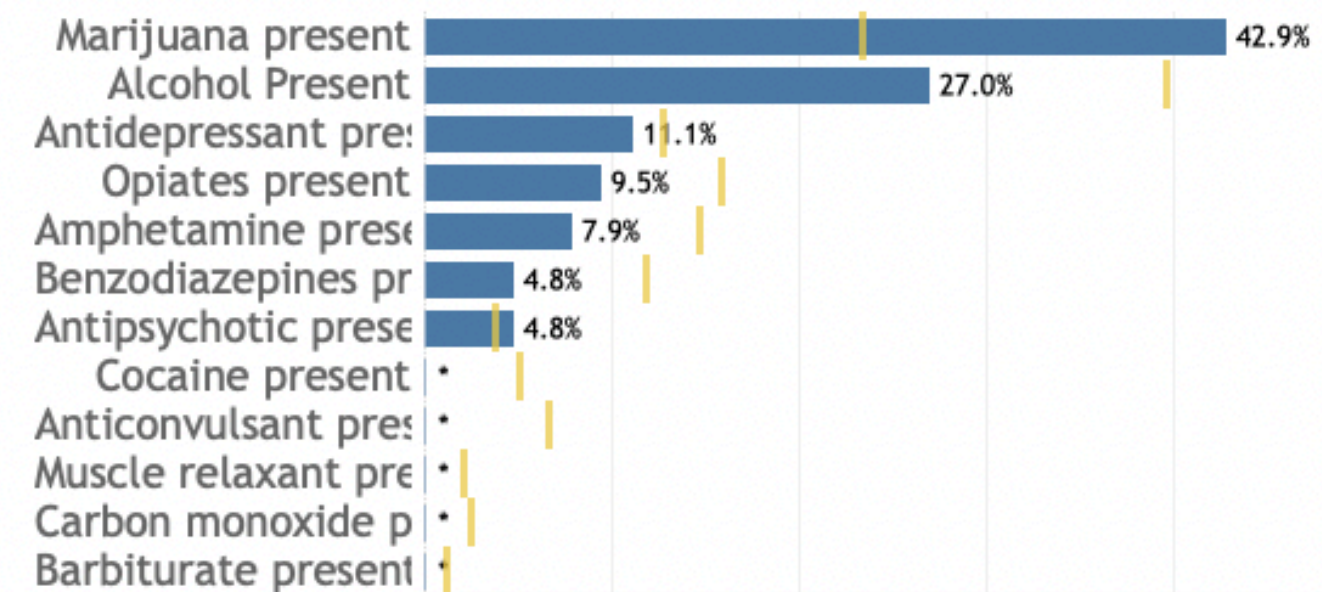
Circumstances

| Entire state: | | Selected population: | |
|------------------|-------|----------------------|----|
| 1+ circumstance: | 1,312 | 1+ circumstance: | 69 |
| No circumstance: | 40 | No circumstance: | |



Toxicology

| Entire state: | | Selected population: | |
|----------------------|-------|----------------------|----|
| Toxicology info ava | 1,081 | Toxicology info ava | 63 |
| No toxicology info : | 271 | No toxicology info : | 8 |



Location where fatal injury was inflicted

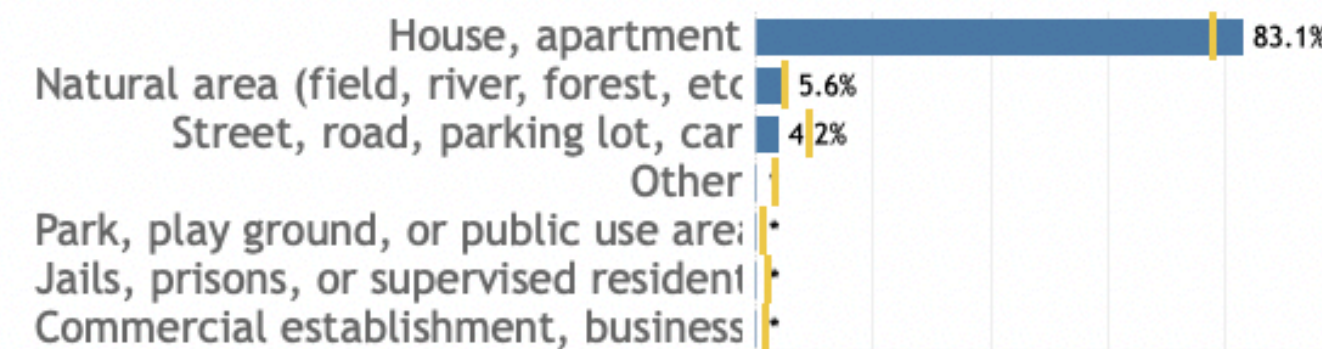


Table 3. Toxicology test results among non-natural, non-homicide deaths, Colorado residents younger than 25 years (population of interest), 2010-2022[‡]

| Toxicology result | Frequency | Percent (%) (n=2,233) |
|-----------------------------------|------------------|----------------------------------|
| Toxicology test results available | 2,223 | |
| No substance | 713 | 31.9% |
| Marijuana present | 651 | 29.2% |
| Alcohol present | 560 | 25.1% |
| Opioid present | 558 | 25.0% |
| Amphetamine present | 255 | 11.4% |
| Cocaine present | 254 | 11.4% |
| Benzodiazepines present | 185 | 8.3% |
| Antidepressant present | 180 | 8.1% |
| Anticonvulsants present | 72 | 3.2% |
| Antipsychotic present | 51 | 2.3% |
| Carbon monoxide present | 38 | 1.7% |
| Muscle relaxant present | 9 | 0.4% |
| Barbiturates present | 6 | 0.3% |

<https://drive.google.com/drive/u/0/folders/1K0jYw-3spzb6F3OTOW1JLupdMK4Z5mfH>

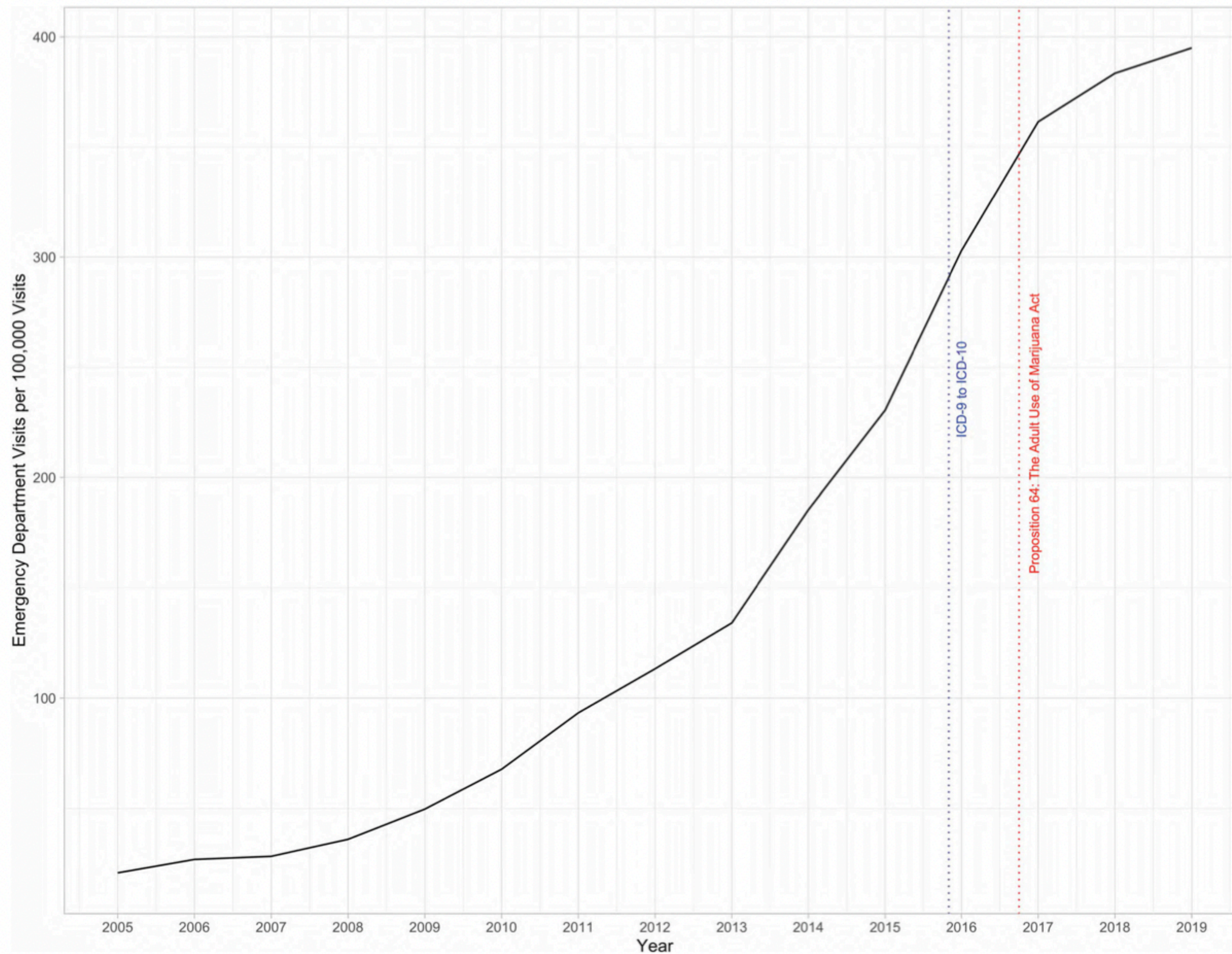
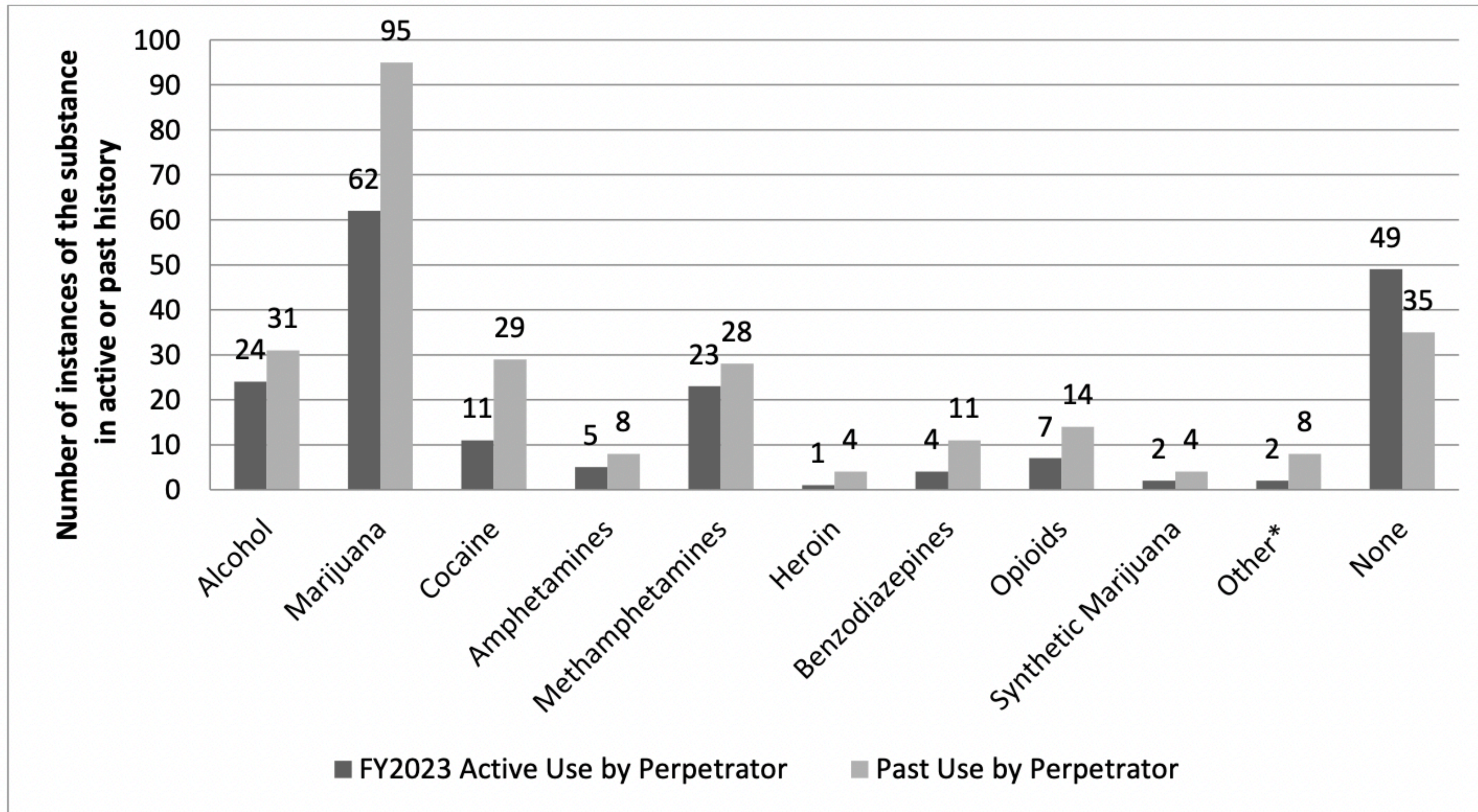


FIGURE 1 Trend in cannabis-related emergency department visit rate per 100,000 visits among adults aged 65 years and older in California, 2005–2019

Figure 11. FY 2023 Confirmed Child Abuse or Neglect Fatality by Substance Abuse by Perpetrator



[https://www.dfps.texas.gov/About DFPS/Reports and Presentations/PEI/documents/2024/2024-03-20 Child Maltreatment Fatalities and Near Fatalities Annual Report.pdf](https://www.dfps.texas.gov/About%20DFPS/Reports%20and%20Presentations/PEI/documents/2024/2024-03-20%20Child%20Maltreatment%20Fatalities%20and%20Near%20Fatalities%20Annual%20Report.pdf)